

Applicant : George Chien et al.  
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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A circuit, comprising:

an amplifier operable to receive an input signal and a feedback signal and produce an intermediate signal; and

a variable-offset circuit operable to receive the intermediate signal and produce an output signal and the feedback signal, the output signal having a DC offset that varies corresponding to a varying parameter of the variable-offset circuit, the amplifier being operable to reduce variation of the DC offset of the output signal.

2. (Original) The circuit of claim 1, further comprising:

a correction circuit operable to receive the output signal and produce a correction signal, the correction signal being applied to the variable-offset circuit to reduce a magnitude of the DC offset of the output signal.

3. (Original) The circuit of claim 2, wherein:

the correction circuit includes,

a digital signal processor operable to measure the DC offset of the output signal and produce a control signal;

and

a digital-to-analog converter operable to receive the control signal and produce the correction signal.

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4. (Original) The circuit of claim 2, wherein:  
the correction signal is a current that is applied to the variable-offset circuit.
5. (Original) The circuit of claim 2, wherein:  
the correction signal is a voltage that is applied to the variable-offset circuit.
6. (Original) The circuit of claim 1, wherein:  
the variable-offset circuit is a variable-gain amplifier circuit and the DC offset of the output signal varies with a gain of the variable-gain amplifier.
7. (Original) The circuit of claim 1, wherein:  
the amplifier is a unity-gain buffer amplifier.
8. (Original) The circuit of claim 1, wherein:  
the circuit is compliant with one or more of the Institute of Electrical and Electronics Engineers standards 802.11, 802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11n, and 802.16.
9. (Original) A circuit, comprising:  
amplifying means for receiving an input signal and a feedback signal and producing an intermediate signal; and  
processing means for receiving the intermediate signal and producing an output signal and the feedback signal, the output signal having a DC offset that varies corresponding to a varying parameter of the processing means, the amplifying means being operable to reduce variation of the DC offset of the output signal.
10. (Original) The circuit of claim 9, further comprising:  
correcting means for receiving the output signal and producing a correction signal, the

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correction signal being used by the processing means to reduce a magnitude of the DC offset of the output signal.

11. (Original) The circuit of claim 10, wherein:

the correcting means includes,

digital signal processing means for measuring the DC offset of the output signal and producing a control signal;

and digital-to-analog conversion means for receiving the control signal and producing the correction signal.

12. (Original) The circuit of claim 10, wherein:

the correction signal is a current that is applied to the processing means.

13. (Original) The circuit of claim 10, wherein:

the correction signal is a voltage that is applied to the processing means.

14. (Original) The circuit of claim 9, wherein:

the processing means is a variable-gain amplifying means and the DC offset of the output signal varies with a gain of the variable-gain amplifying means.

15. (Original) The circuit of claim 9, wherein:

the amplifying means is a unity-gain buffering means.

16. (Original) The circuit of claim 9, wherein:

the circuit is compliant with one or more of the Institute of Electrical and Electronics Engineers standards 802.11, 802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11n, and 802.16.

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17. (Original) A wireless transceiver, comprising:  
a receiver operable to receive a modulated carrier signal, the receiver including,  
    an amplifier operable to receive an input signal and a feedback signal and produce  
    an intermediate signal; and  
    a variable-offset circuit operable to receive the intermediate signal and produce an  
    output signal and the feedback signal, the output signal having a DC offset that varies  
    corresponding to a varying parameter of the variable-offset circuit, the amplifier being  
    operable to reduce variation of the DC offset of the output signal.
18. (Original) The wireless transceiver of claim 17, wherein:  
the receiver includes a correction circuit operable to receive the output signal of the  
output signal and produce a correction signal, the correction signal being applied to the variable-  
offset circuit to reduce a magnitude of the DC offset of the output signal.
19. (Original) The wireless transceiver of claim 18, wherein:  
the correction circuit includes,  
    a digital signal processor operable to measure the DC offset of the output signal  
    and produce a control signal;  
    and  
    a digital-to-analog converter operable to receive the control signal and produce  
    the correction signal.
20. (Original) The wireless transceiver of claim 18, wherein:  
the correction signal is a current that is applied to the variable-offset circuit.
21. (Original) The wireless transceiver of claim 18, wherein:  
the correction signal is a voltage that is applied to the variable-offset circuit.

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22. (Original) The wireless transceiver of claim 17, wherein:  
the variable-offset circuit is a variable-gain amplifier circuit and the DC offset of the  
output signal varies with a gain of the variable-gain amplifier.

23. (Original) The wireless transceiver of claim 17, wherein:  
the amplifier is a unity-gain buffer amplifier.

24. (Original) The wireless transceiver of claim 17, wherein:  
the wireless transceiver is compliant with one or more of the Institute of Electrical and  
Electronics Engineers standards 802.11, 802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i,  
802.11n, and 802.16.

25. (Original) A wireless transceiver, comprising:  
receiver means for receiving a modulated carrier signal,  
the receiver means including,  
amplifying means for receiving an input signal and a feedback signal and  
producing an intermediate signal; and  
processing means for receiving the intermediate signal and producing an output  
signal and the feedback signal, the output signal having a DC offset that varies  
corresponding to a varying parameter of the processing means, the amplifying means  
being operable to reduce variation of the DC offset of the output signal.

26. (Original) The wireless transceiver of claim 25, wherein:  
the receiver means includes correcting means for receiving the output signal and  
producing a correction signal, the correction signal being used by the processing means to reduce  
a magnitude of the DC offset of the output signal.

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27. (Original) The wireless transceiver of claim 26, wherein:  
the correcting means includes,

digital signal processing means for measuring the DC offset of the output signal  
and producing a control signal;

and

digital-to-analog conversion means for receiving the control signal and producing  
the correction signal.

28. (Original) The wireless transceiver of claim 26, wherein:  
the correction signal is a current that is applied to the processing means.

29. (Original) The wireless transceiver of claim 26, wherein:  
the correction signal is a voltage that is applied to the processing means.

30. (Original) The wireless transceiver of claim 25, wherein:  
the processing means is a variable-gain amplifying means and the DC offset of the output  
signal varies with a gain of the variable-gain amplifying means.

31. (Original) The wireless transceiver of claim 25, wherein:  
the amplifying means is a unity-gain buffering means.

32. (Original) The wireless transceiver of claim 25, wherein:  
the wireless transceiver is compliant with one or more of the Institute of Electrical and  
Electronics Engineers standards 802.11, 802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i,  
802.11n, and 802.16.

33. (Original) A method for reducing variation of a DC offset, the method  
comprising:

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amplifying an input signal to produce an intermediate signal;  
processing the intermediate signal to produce a feedback signal and an output signal, the output signal having a DC offset that varies corresponding to a varying parameter of circuitry used to process the intermediate signal; and  
reducing variation of the DC offset of the output signal using the feedback signal.

34. (Original) The method of claim 33, further comprising:  
measuring the DC offset of the output signal; and  
applying a correction signal to the circuitry used to process the intermediate signal to reduce a magnitude of the DC offset of the output signal.

35. (Original) The method of claim 34, wherein:  
measuring the DC offset includes digitally measuring the DC offset; and  
applying a correction signal includes applying an analog correction signal produced responsive to a digital control signal, the digital control signal produced responsive to the digital measurement of the DC offset.

36. (Original) The method of claim 34, wherein:  
applying a correction signal includes applying a correction current.

37. (Original) The method of claim 34, wherein:  
applying a correction signal includes applying a correction voltage.

38. (Original) The method of claim 33, wherein:  
processing the intermediate signal includes variably amplifying the intermediate signal;  
and  
the DC offset of the output signal varies with a variation of the variable amplification.

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39. (Original) The method of claim 33, wherein:  
amplifying the input signal includes buffering the input signal.

40. (Original) The method of claim 33, wherein:  
the method is compliant with one or more of the Institute of Electrical and Electronics  
Engineers standards 802.11, 802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11n, and  
802.16.